

## ABSTRACT OF THE DISCLOSURE

Screw elements for twin-screw extruders are mounted on shafts which rotate in a same direction, with the screw elements having closely intermeshing outer contour for enabling a gentle incorporation of the fibers, in particular natural fibers in plastic melts and maintaining a longest possible fiber length. In the area of the surface of the screw elements, a plurality of surface structure elements are disposed which do not project beyond the outer contour of the screw element.